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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,792	08/25/2003	Donavan J. Allen	RM722-CIP	2018
23996	7590	02/28/2006	EXAMINER	
RICK MARTIN PATENT LAW OFFICES OF RICK MARTIN, PC 416 COFFMAN STREET LONGMONT, CO 80501			SNIDER, THERESA T	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,792

Applicant(s)

ALLEN ET AL.

Examiner

Theresa T. Snider

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/1/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 1230(figure 40). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 1162(page 49) and 1270(page 51). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because: reference character “54” has been used to designate both suction port(page 22) and suction line(page 23);

reference character “1264” has been used to designate both third panel(page 51) and third wall(page 51).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because figure 39 has 2-‘1168’s. Figure 40, ‘1254’ is a suction port however the lead line appears to be directed to the carpet. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from

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the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

Exemplary of such:

Page 1, the status of the copending application should be updated.

Page 23, '404' is disclosed as being a 'fluid' supply tank however figure 4 has it labeled as a 'water' supply tank.

Page 45, the paragraph starting 'Figure 13...' appears to be redundant of page 36.

Page 46, appears to be redundant of pages 36-37.

Appropriate correction is required.

Claim Objections

6. Claims 5, 14-15 and 18-19 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is

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required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims fail to further structurally limit the apparatus but define a function of use.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Claim 10, line 9, 'said redirection member' lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 and 3-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by GB2138280.

GB2138280 discloses an exhaust port defining a flow path there through (fig. 1, #3).

GB2138280 discloses a suction port defining a flow path there through (fig. 1, #6).

GB2138280 discloses a vacuum blower motor (fig. 1, #2).

GB213280 discloses redirection member positioned in the path of fluid expelled from the exhaust port (figs. 1 & 9, #10).

With respect to claim 3, GB2138280 discloses the redirection member having an arcuate shape (fig. 1, #10).

With respect to claim 4, GB2138280 discloses the redirection member configured to reflect fluid flow in a generally opposite direction (figs. 1 & 9, #10, arrows).

With respect to claim 5, GB2138280 discloses the fluid in the exhaust port flowing in a direction opposite that in the suction port (fig. 1, arrows).

With respect to claim 6, GB2138280 discloses the exhaust port having a reduced dimension towards the redirection member (fig. 1, area near #4).

With respect to claim 7, GB2138280 discloses the cross-sectional area of the exhaust and the suction ports are generally rectangular (fig. 5, #3,6).

With respect to claim 8, GB2138280 discloses the cross-sectional area of the suction port is greater than the cross-sectional area of the exhaust port (fig. 5, #3,6).

With respect to claim 9, GB2138280 discloses the redirection member having a major dimension which is substantially coexistent with a major dimension of the exhaust port (figs. 1 and 9, #10).

With respect to claim 10, GB2138280 discloses the redirection member being configured to reflect expelled fluid toward the suction port to agitate the surface being cleaned (page 1, lines 95-101).

With respect to claim 11, GB2138280 discloses the redirection member curved about an axis approximately perpendicular to the path of expelled fluid (fig. 1, #10, arrows).

With respect to claim 12, GB2138280 discloses the redirection member having approximately a 180-degree curvature (figs. 1 & 9, #10).

With respect to claim 13, GB2138280 discloses the exhaust path being defined by an exhaust wall and a common wall and the suction path being defined by a suction wall and the common wall (fig., 1, #11,3,6).

With respect to claim 14, GB2138280 discloses the suction wall riding on the surface to be cleaned (fig. 1, #8).

With respect to claim 15, GB2138280 discloses the redirection portion is integrally formed with the exhaust wall (figs. 1 & 9, #10).

11. Claim 16 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Serva.

Serva discloses an exhaust port defining a flow path there through (fig. 1, #12).

Serva discloses a suction port defining a flow path there through with the flow path being separated by an approximately 45-degree angle from the exhaust flow path (fig. 1, #13).

Serva discloses a vacuum blower motor (fig. 1, #4).

12. Claim 16 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Farnsworth.

Farnsworth discloses an exhaust port defining a flow path there through (fig. 3, #19).

Farnsworth discloses a suction port defining a flow path there through with the flow path being separated by an approximately 45-degree angle from the exhaust flow path (fig. 3, #20).

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Farnsworth discloses a vacuum blower motor (fig. 3, #10).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB213280.

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GB213280 discloses a similar cleaning device however fails to disclose the distances between the elements.

It would have been obvious to one of ordinary skill in the art to determine the most appropriate distance between the exhaust and suction ports of GB213280 to allow for the most effective cleaning of the desired surface area.

17. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Serva as applied to claim 16 above, and further in view of Hentzschel et al..

Serva discloses a similar cleaning device however fails to disclose the suction port being recessed from the exhaust port.

Hentzschel et al. discloses a cleaning device having a suction port that is recessed from an exhaust port (fig. 2, #23). It would have been obvious to one of ordinary skill in the art to make the suction port of Serva recessed, as disclosed in Hentzschel et al., to allow for the most effective removal of dirt from a desired surface by providing for a gap to stir up material from the surface which can be taken up into the suction port.

With respect to claim 18, Serva discloses the exhaust port riding on the surface (fig. 1).

With respect to claim 19, the suction port of Serva in view of Hentzschel et al. does not contact the surface (fig. 2, #23).

18. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth as applied to claim 16 above, and further in view of Hentzschel et al..

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Farnsworth discloses a similar cleaning device however fails to disclose the suction port being recessed from the exhaust port.

Hentzschel et al. discloses a cleaning device having a suction port that is recessed (fig. 2, #23).

It would have been obvious to one of ordinary skill in the art to make the suction port of Farnsworth recessed, as disclosed in Hentzschel et al., to allow for the most effective removal of dirt from a desired surface by providing for a gap to stir up material from the surface which can be taken up into the suction port.

With respect to claim 18, Farnsworth discloses the exhaust port riding on the surface (fig. 5, #27).

With respect to claim 19, the suction port of Serva in view of Hentzschel et al. does not contact the surface (fig. 2, #23).

With respect to claim 20, Farnsworth discloses the suction flow path being approximately perpendicular to the surface (fig. 5, #20).

Conclusion

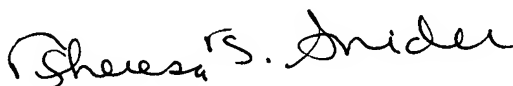
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Turnbull and Coathupe disclose an exhaust port with a redirection member to a suction port. Good and Kern disclose a cleaning device where a suction path and an exhaust path are separated by an angle. Illingworth et al. discloses a fluid recirculating cleaning device.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Theresa T. Snider". The signature is written in a cursive style with a large, stylized "S" and "T".

Theresa T. Snider
Primary Examiner
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2/27/2006